

CLAIMS LISTING:

1.-15. (Canceled)

16. (New) A method for manufacturing a stator or rotor component, comprising:

providing a disk-shaped member comprising a hub and a plurality of blades extending radially outwardly from said hub, wherein free end surfaces of the blades are inclined at an acute, non-zero angle relative to an axial axis of the disk-shaped member;

providing a continuous ring-shaped cover member, wherein an inner surface of said cover member is inclined at an acute, non-zero angle relative to an axial axis of the cover member corresponding to the acute, non-zero angle of the free end surfaces of the blades;

providing a joining material on at least one of 1) the free end surfaces of the blades and 2) the inner surface of the cover member;

moving the disk-shaped member and the cover member axially toward each other until the angled free end surfaces of the blades and the angled inner surface of the cover member almost contact each other so as to form a butt joint with said joining material sandwiched therebetween;

heat-treating the joining material until it forms a melt; and

causing or allowing the joining material melt to solidify so as to join the blades to the cover member.

17. (New) The method of claim 16, further comprising applying pressure to said disk-shaped member and said cover member, acting in an axial direction, during said heat-treating so as to force said disk-shaped member and said cover member toward each other.

18. (New) A method for manufacturing a stator or rotor component, comprising:

providing an annular member comprising an outer ring and a plurality of blades extending radially inwardly from said outer ring, wherein free end surfaces of the blades are inclined at an acute, non-zero angle relative to an axial axis of the annular member;

providing a continuous ring-shaped cover member, wherein an outer surface of said cover member is inclined at an acute, non-zero angle relative to an axial axis of the cover member corresponding to the acute, non-zero angle of the free end surfaces of the blades;

providing a joining material on at least one of 1) the free end surfaces of the blades and 2) the outer surface of the cover member;

moving the annular member and the cover member axially toward each other until the angled free end surfaces of the blades and the angled outer surface of the cover member almost contact each other so as to form a butt joint with said joining material sandwiched therebetween;

heat-treating the joining material until it forms a melt; and

causing or allowing the joining material melt to solidify so as to join the blades to the cover member.

19. (New) The method of claim 18, further comprising applying pressure to said annular member and said cover member, acting in an axial direction, during said heat-treating so as to force said annular member and said cover member toward each other.

20. (New) A method for manufacturing a stator or rotor component, comprising:

providing a disk-shaped member comprising a hub and a plurality of blades extending radially outwardly from said hub, wherein free end surfaces of the blades are convexly or concavely curved relative to an axial axis of the disk-shaped member;

providing a continuous ring-shaped cover member, wherein an inner surface of said cover member is concavely or convexly curved relative to an axial axis of the cover member in a manner corresponding to the convexly or concavely curved shape of the free end surfaces of the blades;

providing a joining material on at least one of 1) the free end surfaces of the blades and 2) the inner surface of the cover member;

moving the disk-shaped member and the cover member axially toward each other until the convexly or concavely curved free end surfaces of the blades and the concavely or convexly curved inner surface of the cover member almost contact each other so as to form a butt joint with said joining material sandwiched therebetween;

heat-treating the joining material until it forms a melt; and

causing or allowing the joining material melt to solidify so as to join the blades to the cover member.

21. (New) The method of claim 20, further comprising applying pressure to said disk-shaped member and said cover member, acting in an axial direction, during said heat-treating so as to force said disk-shaped member and said cover member toward each other.

22. (New) A method for manufacturing a stator or rotor component, comprising:

providing an annular member comprising a hub and a plurality of blades extending radially inwardly from said hub, wherein free end surfaces of the blades are convexly or concavely curved relative to an axial axis of the annular member;

providing a continuous ring-shaped cover member, wherein an inner surface of said cover member is concavely or convexly curved relative to an axial axis of the cover member in a manner corresponding to the convexly or concavely curved shape of the free end surfaces of the blades;

providing a joining material on at least one of 1) the free end surfaces of the blades and 2) the inner surface of the cover member;

moving the annular member and the cover member axially toward each other until the convexly or concavely curved free end surfaces of the blades and the concavely or convexly curved inner surface of the cover member almost contact each other so as to form a butt joint with said joining material sandwiched therebetween;

heat-treating the joining material until it forms a melt; and

causing or allowing the joining material melt to solidify so as to join the blades to the cover member.

23. (New) The method of claim 22, further comprising applying pressure to said annular member and said cover member, acting in an axial direction, during said heat-treating so as to force said annular member and said cover member toward each other.

24. (New) A stator or rotor component made according to any one of claims 16, 18, 20, or 22.